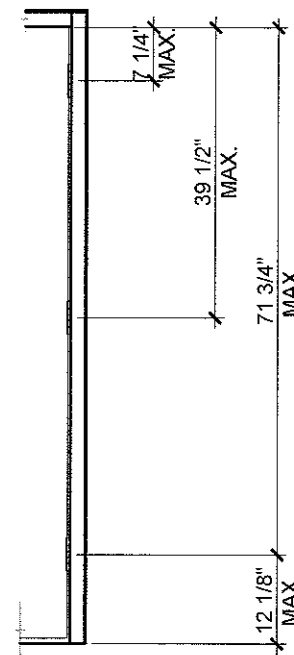


TYPICAL EXTERIOR ELEVATION (X)



HINGE LAYOUT

SERIES AF220 FIBERGLASS INSWING DOOR (LMI & SMI)

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND THE 2006 INTERNATIONAL RESIDENTIAL CODE, INCLUDING HIGH VELOCITY HURRICANE ZONE.
- DOOR RATED FOR LARGE AND SMALL MISSILE IMPACT AND DOES NOT REQUIRE SHUTTERS.
- THIS DOOR IS APPROVED FOR AIR AND WATER INFILTRATION.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND THE 2006 INTERNATIONAL RESIDENTIAL CODE SECTION AS APPLICABLE.
- METAL STRUCTURES NOT BY SPECIAL-LITE, INC. MUST SUPPORT LOADS IMPOSED BY DOOR SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.
- WOOD BUCKS BY OTHERS MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

- A LOAD DURATION FACTOR IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

- DOOR PANEL: 0.120\" FRP FIBERGLASS TEXTURED PANEL
DOOR FRAME: PULTRUDED FIBERGLASS

- ULTIMATE DESIGN LOAD OBTAINED FROM ASCE 7-10, MULTIPLY BY 0.6, SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT.

NOTES:

EGRESS REQUIREMENTS TO BE REVIEWED BY BUILDING OFFICIAL.

HARDWARE:

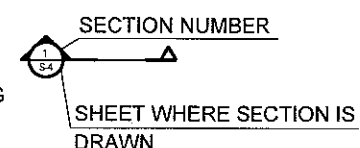
KABA 790 RFID MORTISE LOCK WITH KEY OVERRIDE (OR EQUIVALENT), 40 1/2\" FROM BOTTOM W/ (2) 12 X 1\" FH SMS, (2) 10-32 X 1/4\" FH MS AND (3) 12-24 X 15/16\" FH MS. MOUNT METALLIC STRIKE PLATE, 40\" FROM BOTTOM W/ (2) 1 X 1 1/2\" FH SMS. SURFACE MOUNT METALLIC KEEPER, 1 5/8\" FROM BOTTOM W/ (3) 8 X 3/4\" FH SMS. IVES 253 SURFACE BOLT AT TOP AND BOTTOM.

HINGES: (3) 4 1/2\" SURFACE MOUNT HAGER BB 1191 (OR EQUIVALENT) METALLIC BUTT HINGES W/ (4) 12 X 1\" FH SMS TO FRAME AND PANEL, (8) TOTAL SCREWS PER HINGE.

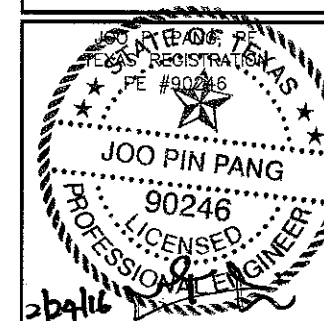
DESIGN LOADS
(FOR SIZES SHOWN ABOVE OR SMALLER) AS PERMITTED BY IBC/IRC
+75.0 PSF
- 75.0 PSF

ABBREVIATIONS AND SYMBOLS

D.O. - DOOR OPENING
F.H. - FRAME HEIGHT
F.W. - FRAME WIDTH
R.O. - ROUGH OPENING
W - WITH
WO - WITHOUT
O.C. - ON CENTER



PRODUCT CONTROL APPROVAL



REVISIONS	DESCRIPTION
NO. DATE	

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 AVE. STE. 205A P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063
www.MCYUS.com MCY.Engineering@Att.net

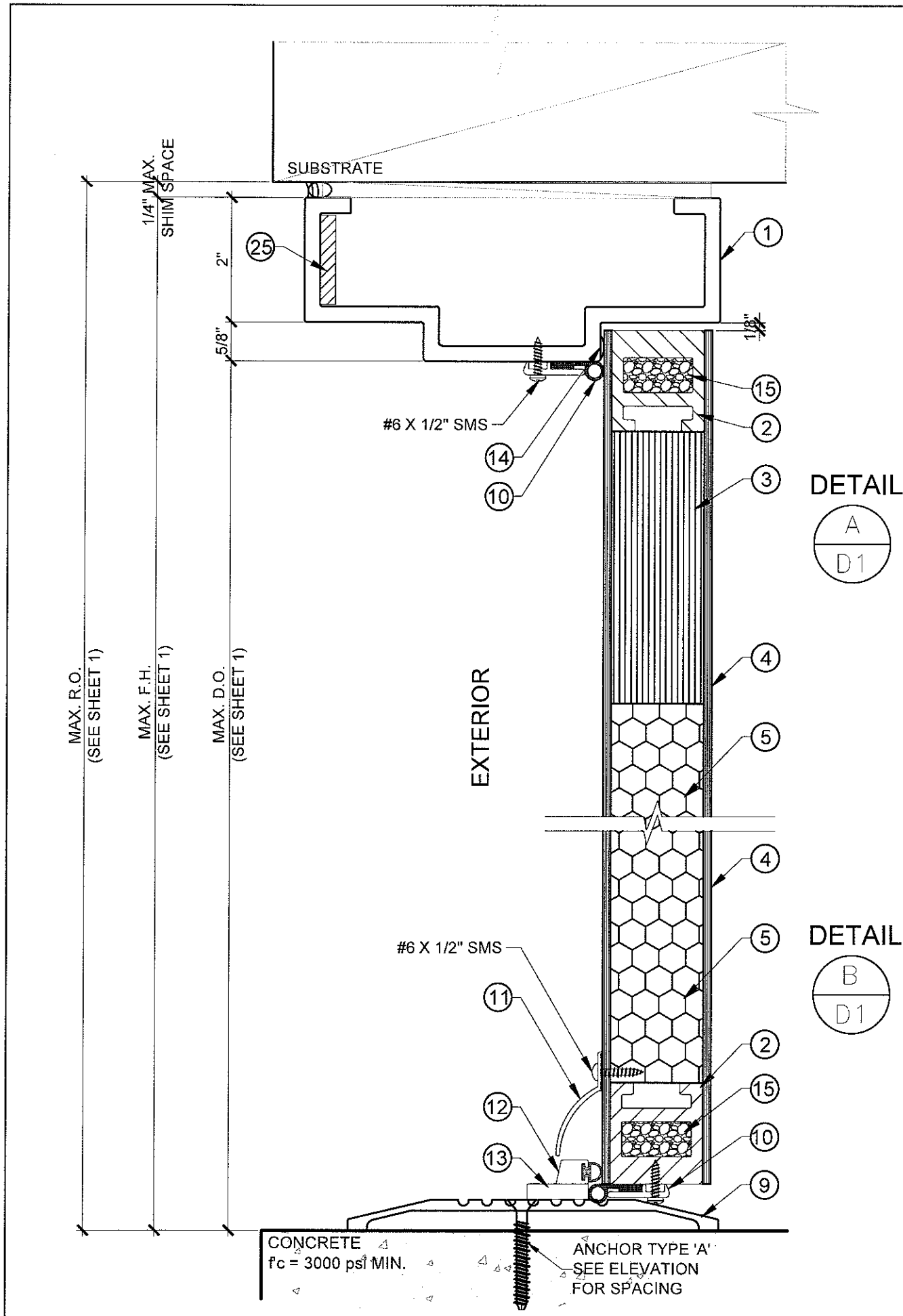
AF220 FIBERGLASS INSWING DOOR (LMI & SMI)

SPECIAL-LITE, INC.
860 SOUTH WILLIAMS STREET
P.O. BOX 6
DECATUR, MI 49045
WWW.SPECIAL-LITE.COM

Special-Lite
Doors with more life.

COVER

DATE	2/24/16
SCALE	AS SHOWN
DRAWN	T.G.
PROJECT	16-107
DRAWING NO.	TA16-02
	1 OF 5



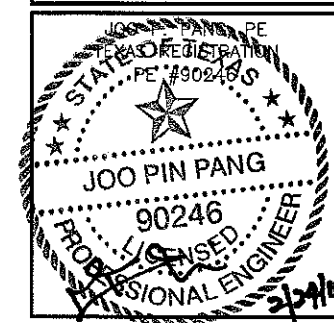
TYPICAL ANCHORS @ JAMB:
(REFER TO ELEVATION FOR SPACING)

- TYPE A** **1/4" DIA. ULTRACON BY 'ELCO'** (Fy=155 ksi Fu = 177 ksi)
* DIRECTLY INTO f'c=3000 PSI CONCRETE MIN.
1-1/2" MIN. EMBED. INTO MASONRY OR CONCRETE, 2-1/2" MIN. EDGE DISTANCE
- TYPE A1** **1/4" DIA. ULTRACON BY 'ELCO'** (Fy=155 ksi Fu = 177 ksi)
* DIRECTLY INTO SG=0.55 WOOD
WITH 1-1/2" MIN. EMBEDMENT, 1" MIN. EDGE DISTANCE,
OR THRU WOOD INTO CONCRETE OR MASONRY
WITH 1-1/2" MIN. EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE
- TYPE B** **3/8" DIA. HLC SLEEVE ANCHOR BY 'HILTI'**
* DIRECTLY INTO f'c=3000 PSI CONCRETE MIN.
1-1/4" MIN. EMBED INTO MASONRY OR CONCRETE, 3" MIN. EDGE DISTANCE
* DIRECTLY INTO f'm=1500 PSI FILLED GROUT FILLED CONCRETE BLOCK
1-1/4" MIN. EMBED INTO FILLED CONC. BLOCK, 3-1/2" MIN. EDGE DISTANCE
- TYPE C** **3/8" DIA. SLEEVE ANCHOR BY "WEJ-IT"**
* DIRECTLY INTO f'c=4000 PSI CONCRETE MIN.
2-3/8" MIN. EMBED, 3-1/2" MIN. EDGE DISTANCE
* DIRECTLY INTO f'c=2000 PSI CONCRETE. BLOCK MIN.
1-1/4" MIN. EMBED, 3-1/2" MIN. EDGE DISTANCE
- TYPE D** **3/8" DIA. POWER BOLTS**
* DIRECTLY INTO f'c=3000 PSI CONCRETE
2-1/2" MIN. EMBED, 3" MIN. EDGE DISTANCE
* DIRECTLY INTO f'c=1500 PSI GROUT FILLED CONCRETE BLOCK
2" MIN. EMBED, 3" MIN. EDGE DISTANCE
- TYPE E** **5/16" DIA. SMS OR MACHINE BOLTS GRADE 2 CRS OR ST/ST**
* DIRECTLY INTO 1/8" THK. STEEL/ALUMINUM 6063-T5

HINGES:
STEEL BUTT HINGES 3 PER LEAF.
FOR HINGE LOCATION SEE SHEET 1.
TO BE FASTENED BY (4) #12-24 x 1" FLATHEAD
MACHINE SCREWS TO THE DOOR PANEL AND TO
THE FRAME. TOTAL OF (8) SCREWS.

NOTE:
SUBSTRATE CAN BE CONCRETE, 2X WOOD BUCKS,
WOOD STRUCTURAL MEMBER(S), CONCRETE BLOCK
WALL AND METAL STRUCTURE (STEEL OR ALUMINUM).
ANCHOR TYPE SHOWN ABOVE SHOULD BE CHOSEN
BASED ON SUBSTRATE TYPE IN THE PROJECT. ANY
TYPE OF ANCHOR NOT SPECIFIED HERE SHOULD BE
ENGINEERED SEPARATELY.

PRODUCT CONTROL APPROVAL

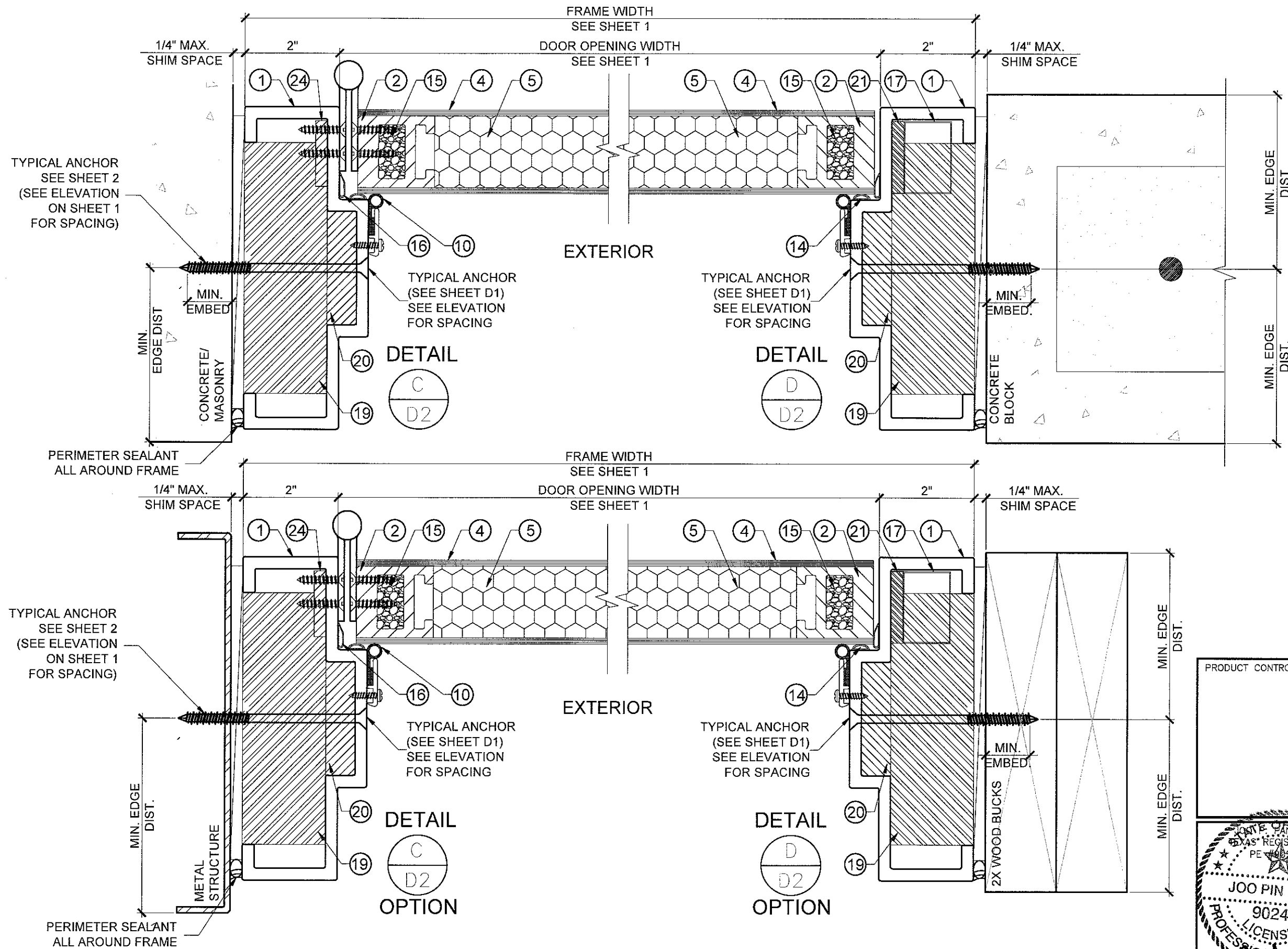


REVISIONS		NO	DATE	DESCRIPTION

MCY ENGINEERING, INC. GLAZING CONSULTANTS		MCY
8501 SW 124 AVE. STE. 205A	P: 305.271.0117	
MIAMI, FL 33183	F: 786.573.5063	
www.MCYUS.com	MCY.Engineering@Att.net	

AF220 FIBERGLASS INSWING DOOR (LMI & SMI)	
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SPECIAL-LITE, INC. 860 SOUTH WILLIAMS STREET P.O. BOX 6 DECATUR, MI 49045 WWW.SPECIAL-LITE.COM	

D1	
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D2	
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PRODUCT CONTROL APPROVAL

2/24/16

JOO PIN PANG
90246
LICENSED PROFESSIONAL ENGINEER

BILL OF MATERIALS					
ITEM	PART NO.	MATERIAL	QTY.	DESCRIPTION	MANUFACTURER / SUPPLIER / REMARKS
1	AF-150	PULTRUDED FIBERGLASS	AS REQD.	FRAME JAMB / HEAD (6 3/4" X 2")	SPECIAL-LITE INC. (0.250" THK.) Fy=40.8 KSI MIN.
2	-	PULTRUDED FIBERGLASS	AS REQD.	SOLID FIBERGLASS STILE	SPECIAL-LITE INC.
3	-	URETHANE	AS REQD.	4 1/2" X 1 1/2" X 20" 20 PCF URETHANE CLOSER REINFORCEMENT	CHEMICALLY BONDED
4	-	FIBERGLASS	AS REQD.	0.120" SANDSTONE TEXTURED FACE SHEET	SPECIAL-LITE INC.
5	PP8-80	POLYPROPYLENE	AS REQD.	AIR-COMB POLYPROPYLENE HONEYCOMB DOOR PANEL CORE	POLY-U-MAC
6	BB1191	ST/ST	3	HAGER BB1191 (OR EQUIVALENT) 4 1/2" SURFACE MOUNT METALLIC BUTT HINGE	HAGER, ATTACHED W/ (4) 12 X 1" FH SMS TO FRAME AND (4) 12 X 1" FH SMS TO PANEL
7	790	ST/ST	1	KABA 790 (OR EQUIVALENT) RFID MORTISE LOCK SET W/ KEY OVERRIDE	KABA
8	253	STEEL	AS REQD.	IVES 253 SURFACE BOLT	IVES
9	426	ALUM.	AS REQD.	SADDLE THRESHOLD	NATIONAL GUARD PRODUCTS
10	328AA	SOLID NEOPRENE	AS REQD.	DOOR SWEEP	ZERO INTERNATIONAL
11	17	ALUMINUM	AS REQD.	RAIN DRIP GUARD	NATIONAL GUARD PRODUCTS
12	2N	NEOPRENE	AS REQD.	NEOPRENE STOP STRIP	NATIONAL GUARD PRODUCTS
13	PT-2005	ALUM.	AS REQD.	1" X 0.25" X 34.75" LG. ALUMINUM STOP STRIP SHIM	-
14	1153BT	RUBBER	AS REQD.	RUBBER SEAL	TRIM-LOK
15	-	URETHANE	AS REQD.	URETHANE FOAM	-
16	5050CL	SILICONE	AS REQD.	ADHESIVE SILICONE GASKET	NATIONAL GUARD PRODUCTS
17	-	STEEL	AS REQD.	4.745" X 0.020" THK. STEEL REINFORCEMENT	BEHIND STRIKE PLATE, ATTACHED W/ (2) 12 X 1 1/2" FH SMS
18	-	URETHANE FOAM	AS REQD.	4 1/2" X 1 1/2" X 8" LG. 20 PCF URETHANE FOAM REINFORCEMENT	INSIDE PANEL AT LOCK LOCATION, CHEMICALLY BONDED
19	-	FIBERGLASS & URETHANE	AS REQD.	1 3/4" X 1 3/4" X 5 3/4" LG. FIBERGLASS BLOCK REINFORCEMENT	INSIDE FRAME JAMB AT EACH ANCHOR LOCATION, CHEMICALLY BONDED
20	-	FIBERGLASS	AS REQD.	1 3/4" X 2 3/8" X 5/8" THK. FIBERGLASS FLAT BAR REINFORCEMENT	BEHIND EACH FRAME JAMB BLOCK, CHEMICALLY BONDED TO FRAME
21	-	FIBERGLASS	AS REQD.	1 1/2" X 12 1/4" LG X 0.254" THK. FIBERGLASS FLAT BAR REINFORCEMENT	AT STRIKE PLATE LOCATION, CHEMICALLY BONDED
22	-	FIBERGLASS	AS REQD.	5 1/4" X 5 1/4" X 1 1/2" X 1/4" THK. FRP CORNER REINFORCEMENT	FASTENED TO 4" X 4" ANGLE USING (4) 8 X 3/4" FH SMS AND CHEMICALLY BONDED
23	-	FIBERGLASS	AS REQD.	4" X 4" X 5.738" X 0.374" THK. SOLID FRP CORNER REINFORCEMENT ANGLE	AT UPPER CORNER, CHEMICALLY BONDED
24	-	PULTRUDED FIBERGLASS		1 3/8" X 8" LG. X 1/4" THK. HINGE REINF.	CHEMICALLY BONDED TO FRAME
25	-	FIBERGLASS	AS REQD.	1 7/16" X 18" X 1/4" THK. FIBERGLASS FLAT BAR REINFORCEMENT	AT FRAME HEAD, CHEMICALLY BONDED TO FRAME

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